

15 AUGUST 2003



Operations

WARGAMING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: HQ USAF/XOXS
(Lt Col David Strand)
Supersedes AFI 10-233, 1 July 2000

Certified by: HQ USAF/XOX
(Brig Gen Michael C. Gould)

Pages: 16
Distribution: F

This Air Force Instruction (AFI) implements portions of AFD 10-23, *Innovation Program*, by establishing guidance for conduct of Air Force Title 10 wargames and Air Force participation in major Joint and Service wargames designed to impact future Air Force doctrine, force structure and employment concepts. In addition, the AFI outlines procedures and responsibilities for HQ USAF staff agencies and subordinate Air Force agencies that are tasked for wargame support. HQ USAF and subordinate units should maintain and dispose of records created as a result of prescribed processes in accordance with AFMAN 37-139, *Records Disposition Schedule*. Major Commands may supplement this AFI. Forward proposed revisions to HQ USAF/XOXS, 1480 Air Force Pentagon, Washington, D.C. 20330-1480.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

Relevant actions of the rescinded AFI 10-233, *Conduct of Key Wargames*, are incorporated into this AFI. In addition, the procedures and processes resulting from the recent HQ USAF reorganization have been updated and should be reviewed to ensure compliance.

Chapter 1

WARGAMING OVERVIEW

1.1. Purpose. This AFI supports AFPD 10-23, *Innovation Program*, by providing guidance for conduct of Air Force Title 10 wargames, MAJCOM wargames, and other wargames used to explore new technology-enabled warfighting capabilities and challenges, and Air Force participation in major OSD, Joint, and Service wargames designed to impact future Air Force doctrine, force structure and employment concepts. Note: The term wargame will be used throughout this AFI to encompass all major wargames in which the Air Force participates as defined above.

1.2. Objectives. The following subparagraphs summarize the objectives this AFI is expected to achieve:

1.2.1. Provide procedures for HQ USAF policy, guidance, and oversight (PGO) of Air Force Title 10 Wargames and Air Force participation in other Joint and Service major wargames conducted by OSD, Joint Staff, Unified Commands, and other Services.

1.2.2. Document processes and procedures for HQ USAF and Air Force MAJCOMs to plan and conduct Air Force Title 10 Wargames and for Air Force participation in major OSD, Joint and Service wargames designed to impact future Air Force doctrine, force structure and employment concepts and for Air Force wargames used to explore technology-enabled warfighting capabilities and prevent technological surprises.

1.2.3. Designate HQ USAF/XO and HQ USAF/XP as HQ USAF Executive Agents (EAs) for mid-term and far-term Title 10 wargames, respectively, and HQ USAF/IL as HQ USAF EA for Title 10 and other major wargames focused on logistics and combat support.

1.2.4. Task the HQ USAF/XO Directorate of Operational Plans & Joint Matters (HQ USAF/XOX) as the HQ USAF Office of Primary Responsibility (OPR) for HQ USAF/XO Title 10 and other major near and mid-term wargames focusing on concept exploration, HQ USAF/XP Directorate of Strategic Plans (HQ USAF/XPX) as the HQ USAF/XP OPR for HQ USAF/XP Title 10 and other major far-term major wargames exploring future capabilities, and HQ USAF/IL Directorate of Logistics Readiness (HQ USAF/ILG) as the HQ USAF OPR for Title 10 and other major wargames primarily focused on logistics and combat support.

1.2.5. Task the HQ USAF/DP Air Force Senior Leadership Management Office (AFSLMO) as the HQ USAF Office of Primary Responsibility (OPR) for filling Air Force senior leadership wargaming positions based on requirements identified by the EAs and OPRs at least 12 months in advance if possible.

1.2.6. Formalize tasks and responsibilities of supporting HQ USAF and subordinate Air Force agencies tasked to support Title 10 and other major wargames conducted by Air Force agencies, the Joint Staff, Unified Commands, and the other Services.

1.2.7. Establish procedures for using Air Force Reserve Command (AFRC) and Air National Guard (ANG) support teams to assist wargame OPRs in planning, executing, and assessing Title 10 and other major wargames.

1.2.8. Provide guidance for conduct of training and education programs to prepare Air Force personnel, including senior officers, for participation in Title 10 and other major wargames conducted by Air Force agencies, OSD, the Joint Staff, Unified Commands, and the other Services.

Chapter 2

WARGAME PROCESSES AND PROCEDURES

2.1. Air Force Wargame Strategy. Title 10 and other major Joint and Service wargames are designed to explore new concepts and capabilities; study and refine emerging operational concepts; prevent technological, strategic, and operational surprise; and evaluate the Air Force Strategic Plan and Vision, and assess alternative plans and visions. Such wargames are one tool used to shape military capabilities to best respond to emerging future warfighting environments and National security challenges. These wargames use a range of plausible wargame scenarios addressing military operations other than war through major theater warfare to improve understanding of future challenges and potential responses. These results are also used to guide follow-on studies, analyses, modeling and simulation that are used to address the key warfighting insights, questions and issues. Outputs from mid-term wargames with the associated follow-on supporting studies and analyses are used to advance new technologies and concepts, contribute to the Air Force's Quadrennial Defense Review (QDR) process, and develop strategies and doctrine for incorporation into experiments, exercises, and other forums for evaluation. Similarly, outputs from far-term wargames are used to impact strategic planning, experimentation, concept development, concepts of operations, future force structure investment streams, and the Air Force Vision.

2.2. Air Force Title 10 Wargames. The Air Force has two Title 10 wargames. Global Engagement (GE) is the Air Force's near/mid-term wargame. GE is designed to explore emerging operational concepts for employment of air and space power. The Air Force Future Capabilities Game (FG) is the Air Force's far-term wargame. FG explores alternative futures and force structure to support strategic planning inputs.

2.3. Air Force Wargame Policy, Guidance and Oversight.

2.3.1. The Chief of Staff, United States Air Force (CSAF) maintains oversight and is the approval authority for HQ USAF Title 10 wargames and Air Force participation in major Joint and Service wargames designed to impact future Air Force doctrine, force structure and employment concepts.

2.3.2. The EAs identified in this AFI for Air Force Title 10 wargames have the responsibility to plan and conduct the Title 10 wargame and is the supported organization. The CSAF is the tasking authority for the study of major insights and issues identified during HQ USAF Title 10 wargames.

2.3.3. The results of HQ USAF Title 10 Wargames will be briefed to the CSAF and other senior leaders, as directed.

2.3.4. Upon completion of tasking directed by the CSAF as a result of HQ USAF Title 10 Wargame activity, the responsible OPR will ensure the final reports are briefed and published as appropriate.

2.4. Air Force Wargame Delegation of Authority. The following sub-paragraphs define the division of responsibilities among the various agencies that plan and conduct Air Force Title 10 Wargames:

2.4.1. The designated Title 10 Wargame OPR is responsible for accomplishing the following:

2.4.1.1. Provide PGO over wargame activities and develop wargame goals and objectives in accordance with CSAF guidance.

2.4.1.2. Administer training to prepare players for Title 10 and other major wargames. After such training, participants should better understand the medium, allowing them to contribute as much

of their expertise to the process as possible. The result will be more accurate and thorough Air Force wargames and stronger Air Force influence throughout the Joint wargaming community.

2.4.1.3. Develop required funding estimates for HQ USAF Title 10 and other major wargames and champion their funding in the Program Objective Memorandum (POM). Funding considerations should cover all wargame costs to include seminars, workshops, materials, wargame execution, wargaming facilities, key participant TDY costs, modeling and simulation, and pre/post-wargame analysis. It should also include participation by MAJCOMs and supporting agencies, when required.

2.4.1.4. Develop and acquire CSAF approval for Air Force Title 10 wargame scenarios and game designs.

2.4.1.5. Identify requirements for senior participants and distinguished guests.

2.4.1.6. Identify and source manning (0-6 and below) to support the wargame and associated events. Sources of manning include Headquarters Air Force, MAJCOMs, Air Force Agencies, Unified Commands, Sister Services, other US government agencies and contractors.

2.4.1.7. Identify wargame outputs that merit further study. Follow-on analysis will usually be tasked to an appropriate office or agency. Tracking the studies' recommendations will be the responsibility of the wargame OPR.

2.4.1.8. Brief wargame insights and final reports to appropriate Air Force audiences. Disseminate wargame reports, as appropriate.

2.4.1.9. Take action to ensure that outcomes from wargaming efforts are available to decision makers so they can influence Air Force vision, strategy, doctrine, plans, and programs.

2.4.1.10. Establish an ongoing dialogue with offices engaged in Air Force experimentation to ensure that the latest relevant experimentation results are incorporated into wargame play.

2.4.2. Agencies or offices requested to support a Title 10 Wargame will:

2.4.2.1. Provide assistance regarding specific segments of the wargame, usually in the form of subject matter experts.

2.4.2.2. Provide funding requirements to the wargame OPR in the format and within established timelines required to influence the Planning, Programming, and Budgeting System (PPBS) process.

2.4.2.3. Support the wargame during wargame planning, execution and pre/post-wargame analysis processes.

2.4.2.4. Establish an ongoing dialogue with offices engaged in Air Force experimentation to ensure that the latest relevant experimentation results are incorporated into game play.

2.4.3. In some cases, the wargame OPR may direct a wargaming center, other government agency, or contractor, to act as the wargame Implementing Agent (IA) or Wargame Host for a specific wargame. When directed by the HQ USAF OPR, the Wargame Host will provide facilities, administrative support, and other Services to the wargame OPR, as tasked in the implementing directive or as specified in a wargame Memorandum of Agreement (MOA) or Statement of Work (SOW). When designated as the wargame Implementing Agent, the wargaming center, other government agency, or contractor, will accomplish the following:

- 2.4.3.1. Provide funding requirements or contract related information to the wargame OPR in the format and timelines required to support the PPBS process.
- 2.4.3.2. Support the wargame OPR during wargame planning, execution and post-wargame assessment processes.
- 2.4.3.3. In coordination with the wargame OPR, develop the wargame construct to meet the wargame objectives.
- 2.4.3.4. Provide facilities, contract support, and expertise to ensure game mechanics support the objectives.
- 2.4.3.5. Execute the wargame in accordance with plans approved by the wargame OPR.
- 2.4.3.6. Perform other tasks as specified in wargame tasking messages or in SOWs/MOAs with the HQ USAF wargame OPR.

2.5. Post-Wargame Actions.

- 2.5.1. After Action Reviews (AARs) consisting of briefings and reports summarizing wargaming results are a primary vehicle for developing post-wargame taskings and studies. The primary source for such tasking is the wargame OPR.
- 2.5.2. The wargame OPR is responsible for staffing proposed taskings and follow-on studies for submission to the CSAF for approval.
- 2.5.3. Initial after action issues identified in HQ USAF Title 10 Wargames will be briefed to the CSAF and other senior leaders within 60 days after completion of the wargame, if possible.
- 2.5.4. The organization assigned a post-wargame tasking or study is responsible for its completion, including staffing within HQ USAF and other agencies. The wargame OPR is responsible for providing the completed study to the appropriate leadership levels.
- 2.5.5. Post-wargame analysis, as well as wargame results, insights, and final reports will be distributed to offices engaged in Air Force experimentation.

2.6. Other Wargame Participation.

- 2.6.1. For Title 10 wargames sponsored by other Services, HQ USAF OPRs will orchestrate Air Force participation to ensure accurate representation of air and space power and participation by appropriate senior Air Force leaders. Specific duties include determining the concepts and portrayal of air and space power that Air Force participants will convey to other Services players, and arranging for required Air Force subject matter expert participation. HQ USAF/XPXC will normally develop the Air Force force structures for Title 10 Wargames, when required. The OPR will conduct a meeting of all Air Force participants before the game to introduce the Air Force members, allow questions to be asked, and ensure that the Air Force presents a unified position to Joint agencies and the other Services. Following the wargame, the appropriate Air Force OPR will be responsible for post-game reports.
- 2.6.2. For other major wargames conducted by Air Force MAJCOMs, OSD, Unified Commands, and the Joint Staff, the Air Force wargame OPR generally will follow the procedures and format outlined in the preceding paragraphs. Should the Air Force OPR for Joint or other Service wargames not reside at HQ USAF, appropriate HQ USAF OPRs will provide all possible assistance.

2.7. Air Force Wargame Budget Process. Financial resources for Air Force sponsored wargames, and support to other Service Title 10, Joint wargames, and wargame training will be programmed and funded within the POM process. This requirement includes funds for planning, executing, and conducting studies and analysis for Air Force Title 10 wargames, and Air Force participation in Joint, other Service Title 10 wargames, and other major wargames, if required. HQ USAF/XOXS and HQ USAF XPXC develop funding requirements and insert them into the Air Force POM, with exception of wargames with a primary focus on logistics and combat support.

2.8. Air Force Reserve Command (AFRC) and Air National Guard (ANG) Wargame Support. AFRC and the ANG have qualified personnel capable of supporting the conduct of wargames, and can significantly assist wargame OPRs in planning, execution and pre/post-wargame assessment. Agencies requiring Air Reserve Component (ARC) personnel will provide specific requirements to the Air Reserve Component Liaison Officer (ARCLO) in HQ USAF/XOXS as soon as possible after requirements are identified. Additional procedures for ARC augmentation are included in [Attachment 2](#).

Chapter 3

WARGAME RESPONSIBILITIES

3.1. Headquarters, United States Air Force (HQ USAF).

3.1.1. **HQ USAF/XO** is designated the Air Force Executive Agent (EA) for near and mid-term Air Force Title 10 wargames. For the purpose of this AFI, near-term is from the beginning of the POM through nine years, and mid-term is defined as 10-15 years beyond the beginning of the current POM year. AF/XO will also be the Air Force EA for other Title 10 and/or other major wargames exploring concepts over the near and mid-term that are sponsored by the Joint Staff, Unified Commands, and the other Services. Additionally, HQ USAF/XO will be the EA for all wargames that clearly have an operational/CONOPS construct.

3.1.2. **HQ USAF/XOX** is the HQ USAF OPR for HQ USAF/XO sponsored Title 10 and other major wargames. HQ USAF/XOXS is the HQ USAF/XOX action agency for Title 10 wargames and acts on behalf of HQ USAF/XOX to accomplish the following:

3.1.2.1. Plan and conduct the Global Engagement (GE) Wargame Series. All facets of wargame planning, execution, and post-wargame activities will be under the direction and guidance of HQ USAF/XOX.

3.1.2.2. Coordinate Air Force participation, conduct, or arrange for, Air Force preparation training, attend planning conferences, nominate the Air Force force structure and operational concepts, and identify requirements for Air Force senior leader participation. AF/XOXS is the focal point for Air Force participation in other Service and Joint near and mid-term wargames. The purpose of having a single focal point is to provide a unified Air Force position on the contribution of air and space power to non-USAF agencies. All other Air Force offices/agencies and MAJCOMs will use the AF/XOXS channel during preparation for near and mid-term Title 10 wargames.

3.1.2.3. Develop and coordinate the strategies and operational concepts to be explored during HQ USAF/XO sponsored Title 10 wargames.

3.1.2.4. Coordinate and integrate requirements for AFRC and ANG augmentation support with appropriate agencies.

3.1.2.5. Participate in Title 10 and other major wargames and produce wargame final reports, as required.

3.1.2.6. Develop required funding estimates for Global Engagement and Air Force participation in all other wargames except the Future Capabilities Wargames and wargames with primary focus on logistics and combat support and champion their funding in the Program Objective Memorandum (POM). Funding should cover wargame costs to include: seminars, workshops, materials, wargame execution, wargaming facilities, modeling and simulation, and pre/post-wargame analysis.

3.1.2.7. Coordinate with appropriate Air Force OPR's, as required, on their functional wargaming responsibilities in support of Air Force Title 10 Wargames and other major near and mid-term Joint and other Service wargames.

3.1.3. **HQ USAF/XP** is designated as the Air Force EA for far-term Air Force Title 10 Wargames. For the purposes of this AFI, far-term is defined as more than 15 years beyond the beginning of the

current POM year. AF/XP will also serve as the Air Force EA for far-term Title 10 Wargames of the other Services, OSD, the Joint Staff, and the Unified Commands. Additionally, HQ USAF/XP will be the EA for all wargames that clearly have a future concept/future force structure construct.

3.1.4. **HQ USAF/XPX** is the HQ USAF OPR for HQ USAF/XP wargames. HQ USAF/XPXC is the HQ USAF/XPX action agency for Title 10 wargames and acts on behalf of HQ USAF/XPX to accomplish the following:

3.1.4.1. Plan and conduct the Air Force Future Capabilities Wargame (FG) series of wargames. All facets of wargame planning, execution, and post-game activities will be under the direction and guidance of HQ USAF/XPX.

3.1.4.2. Coordinate Air Force participation, conduct, or arrange for, Air Force preparation training, attend planning conferences, develop/forward the AF force structure and operational concepts, and identify requirements for Air Force senior leadership participation. AF/XPXC is the focal point for Air Force participation in other Service and Joint far-term wargames. The purpose of having a focal point is to provide a unified, single Air Force position on the contributions of air and space power to non-USAF agencies. All other Air Force offices/agencies and MAJCOMs will use the AF/XPXC channel during preparation for far-term Title 10 wargames.

3.1.4.3. Develop and coordinate the Air Force strategies and operational concepts to be explored during HQ USAF/XP sponsored Title 10 wargames.

3.1.4.4. Participate in Title 10 and other major wargames and prepare wargame final reports, as required.

3.1.4.5. Develop and nominate the Air Force force structure for wargames, as required.

3.1.4.6. Develop required funding estimates for FG and Air Force participation in major far-term Joint and other Service wargames and champion their funding in the Program Objective Memorandum (POM). Funding should cover wargame costs to include: seminars, workshops, materials, wargame execution, wargaming facilities, modeling and simulation, and pre/post-wargame analysis.

3.1.4.7. Coordinate with appropriate Air Force OPRs, as required, on their functional wargaming responsibilities in support of Air Force Title 10 Wargames and other major far-term Joint and other Service wargames.

3.1.5. **HQ USAF/IL** is designated as the Air Force EA for Title 10 logistics wargames. AF/IL will also serve as the HQ USAF EA for major logistics-centric wargames conducted by the Joint Staff, Unified Commands and the other Services.

3.1.6. **HQ USAF/ILG** is the HQ USAF/IL OPR for participation in major logistics-centric wargames (near, mid, and far term) and a HQ USAF Office of Collateral Responsibility (OCR) for logistics participation in other wargames. HQ USAF/ILGX is the HQ USAF/ILG action agency for other major wargames with a primary focus on logistics and combat support and acts on behalf of HQ USAF/ILG to accomplish the following:

3.1.6.1. Ensure that realistic logistics is integrated into Title 10 and other major wargames.

3.1.6.2. Assist the wargame OPR in determining logistics strategies and capabilities used in Title 10 and other major wargames.

3.1.6.3. Identify alternate action agencies for logistics support, when required.

3.1.6.4. Provide functional expertise for developing scenarios that facilitate accomplishment of logistics goals and objectives.

3.1.6.5. Attend planning conferences, participate in wargames, and provide inputs into post-war-game assessments, as required.

3.1.7. **HQ USAF/AFSLMO** is the HQ USAF/DP OPR for filling Air Force senior leader wargaming positions based on requirements identified by the HQ USAF Executive Agents (EAs) and/or OPRs. AFSLMO acts on behalf of the USAF/DP to accomplish the following:

3.1.7.1. Provide listings, as required, of AF senior leaders based on functional requirements identified by the EAs or OPRs (e.g. Generals who are familiar and/or have experience in the AOR, have attended the JFACC/CFACC Course, have attended the DIRMBOFOR Course, etc.).

3.1.7.2. Based on a returned priority list of candidates, or a by-name request for specific individual (coordinated through the EA and approved by the AF CSAF), coordinate and task specified senior leaders to participate in the wargame to include key training sessions and spin-up events identified by the wargame OPR.

3.1.8. **HQ USAF/XOI**, as OPR for Information Operations (IO) including Information-In-Warfare (IIW) and Information Warfare (IW), will accomplish the following:

3.1.8.1. Provide policy and guidance, as necessary, to IO-related organizations/agencies on IIW (including integrated ISR assets), and IW (including function of counter information).

3.1.8.2. Assist wargame action agencies as a liaison with the IO and Intelligence Communities (e.g., Central Intelligence Agency, Defense Intelligence Agency, National Imagery and Mapping Agency, National Security Agency, etc.).

3.1.8.3. Assist wargame action agencies in developing realistic wargame scenarios.

3.1.8.4. Participate in Title 10 and other major wargames and final report development, as required.

3.1.9. **HQ USAF/XOS**, as the OPR for Space Operations and Integration, will accomplish the following:

3.1.9.1. Provide PGO, as necessary, to space organizations/agencies on wargaming issues.

3.1.9.2. Act as primary liaison to the space community (e.g. National Aeronautics and Space Administration, National Oceanographic and Atmospheric Administration).

3.1.9.3. Assist AF/XOO, AF/XPX and the wargame OPR in developing realistic wargame scenarios.

3.1.9.4. Participate in Title 10 and other major wargames and final report development, as required.

3.1.10. **HQ USAF/XOW**, as the OPR for Air and Space Environmental Support, will accomplish the following:

3.1.10.1. Provide PGO, as necessary to meteorological and space environmental support agencies on wargaming issues.

3.1.10.2. Assist the wargame OPR to ensure that representative and realistic weather play is integrated into wargames.

3.1.10.3. Provide functional expertise for developing scenarios that facilitate accomplishment of “weather impact/non-impact objectives.

3.1.10.4. Participate in Title 10 and other major wargames and final report development, as required.

3.1.11. **Other HQ USAF Staff Agencies and Task Force Champions** will provide support to Title 10 and other major wargames, as requested by the HQ USAF wargame action agency.

3.2. Major Commands (MAJCOMs):

3.2.1. Establish a MAJCOM OPR to attend planning conferences, support major wargame planning, execution, and post-wargame assessments, when required. Requirements for MAJCOM-unique support should be identified early in the wargame planning process.

3.2.2. Assist the HQ USAF OPR to ensure that CONOPS and capabilities are accurately portrayed in the wargame.

3.2.3. Observe and participate in Title 10 and other major wargames and report observations to the appropriate HQ USAF action agency, as required and sponsor MAJCOM-unique wargames.

3.2.4. MAJCOMs conducting major wargames (currently AFSPC & AMC) should identify support requirements early in the wargame planning process. They should also publish MAJCOM supplements to this AFI identifying MAJCOM unique requirements such as airlift, air refueling, space operations and support, and modeling and simulation. In addition, they should provide specific requirements identified during wargame planning to HQ USAF/XOXS (or other HQ USAF OPR, when appropriate) for assistance in acquiring support from HQ USAF staff agencies and other MAJCOMs.

3.2.5. Conduct pre and post-wargame analysis, as required.

3.3. Direct Reporting Units (DRUs) and Field Operating Agencies (FOAs):

3.3.1. Air Force Doctrine Center (AFDC):

3.3.1.1. Advise and assist Title 10 and other major wargame action agencies with doctrinal issues.

3.3.1.2. Observe and participate in Title 10 and other major wargames and report observations, as required.

3.3.2. Air Force Studies and Analyses Agency (AFSAA):

3.3.2.1. Provide analytical assessment and model support and assist in adjudication of Title 10 wargame events and scenario/database reviews, as directed.

3.3.2.2. Conduct pre- and post-wargame analysis, when directed.

3.3.2.3. Observe and participate in Title 10 and other major wargames and report observations, as required.

3.3.3. Air Force Logistics Management Agency (AFLMA).

- 3.3.3.1. Observe and participate in Title 10 and other major wargames and report observations, as required.
- 3.3.3.2. Provide analytical assessment, model support, and assistance in adjudication of Title 10 and other major wargame events and scenario/data base reviews.
- 3.3.3.3. Assist HQ USAF/IL and the wargame action agency to ensure logistics capabilities are accurately portrayed in wargames.
- 3.3.3.4. Attend planning conferences, participate in Title 10 and other major wargames, and provide inputs into post-wargame assessments, as required.
- 3.3.3.5. Conduct pre- and post-wargame analysis, as required.

3.4. Air University/College of Aerospace Doctrine, Research and Education (AU/CADRE).

- 3.4.1. Provide academic support to prepare Air Force personnel for participation in Title 10 and other major wargames, when directed by the wargame OPR. Additional guidance for conduct of Title 10 and other major wargame training programs is included in [Attachment 3](#).
- 3.4.2. Support Air Force Title 10 wargame planning, execution, and assessment efforts and wargames associated with the QDR and provide other wargame support to major wargames conducted by the Joint Staff, Unified Commands; other Services, and Air Force MAJCOMs, as directed by the HQ USAF wargame OPR.

3.5. Air Force Research Laboratory (AFRL).

- 3.5.1. AFRL is designated as the Air Force EA for Air Force Technology Exploration Games (AFTEG) and will provide subject matter expertise on future technological concepts/capabilities, as required. AFRL will also attend planning conferences, seminars, workshops and wargames, when required.
- 3.5.2. AFRL/XP is the AFRL OPR for the AFTEG and AFRL support of and participation in Title 10, Joint, and other Service wargames. AFRL/XP is also the OPR for technology “red teaming” support for Air Force Title 10, Joint, and other Service wargames. AFRL/XP will accomplish the following:
 - 3.5.2.1. Provide technology forecasts for future weapons systems and capability descriptions. This input will be used to develop the HQ USAF/XPXC Toolbox. Force structures for wargames in which the Air Force participates are subsets of the Toolbox.
 - 3.5.2.2. Plan, budget for and conduct AFTEGs to refine technology concepts and capability descriptions within the current construct for Title 10 and other major wargames and to prevent technological surprise.
 - 3.5.2.3. Prepare and provide technology based “red team” concept and capability descriptions to support Air Force and Joint wargames.
 - 3.5.2.4. Include the lessons learned and insights gained from Air Force and Joint wargaming in the preparation of AFRL S&T investment plans, including the AFRL POM inputs.

3.6. Air Force Agency for Modeling and Simulation (AFAMS):

3.6.1. Develop wargame and experimentation support tools, and provide technical and doctrinal assessment of the modeling and simulation tools under AFAMS control which may be appropriate to support wargame events, as directed.

3.6.2. Participate and provide wargame model expertise during pre-wargame planning, as directed.

3.6.3. Observe and participate in Title 10 and other major wargames in which simulations are used and report observations (relative to the performance and output of the simulations used), as directed.

RONALD E. KEYS, Lt General, USAF
DCS/Air & Space Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 10-23, *Innovation Program*

Abbreviations and Acronyms

AAR—After Action Review

AFAMS—Air Force Agency for Modeling and Simulation

AFC2ISRC—Air Force Command and Control Intelligence Surveillance and Reconnaissance Center

AFCW—Air and Space Future Capabilities Wargame

AFDC—Air Force Doctrine Center

AFI—Air Force Instruction

AFLMA—Air Force Logistics Management Agency

AFRC—Air Force Reserve Command

AFRL—Air Force Research Laboratory

AFSAA—Air Force Studies and Analyses Agency

AFSLMO—Air Force Senior Leadership Management Office

AFWI—Air Force Wargaming Institute

ANG—Air National Guard

ARC—Air Reserve Component

ARCLO—Air Reserve Component Liaison Officer

ATWG—Army Transformation Wargame

AU/CADRE—Air University/College of Aerospace Doctrine, Research and Education

CSAF—Chief of Staff, United States Air Force

DRU—Direct Reporting Unit

FOA—Field Operating Agency

GE—Global Engagement

IA—Implementing Agency

IO—Information Operations

IMA—Individual Mobilization Augmentee

IIW—Information-In-Warfare

IW—Information Warfare

MOA—Memorandum of Agreement

OCR—Office of Collateral Responsibility

OPR—Office of Primary Responsibility

PGO—Policy, Guidance, and Oversight

PPBS—Planning, Programming, and Budgeting System

QDR—Quadrennial Defense Review

SOW—Statement of Work

Terms

Executive Agent (EA)—An agency that has been assigned responsibility to conduct specific tasks by a higher level of command with the authority to establish policy and effect decisions to ensure mission success.

Implementing Agent—The wargame OPR is normally the Implementing Agent. When the OPR and Implementing Agent are separate agencies, the wargame OPR is the supported organization and the Implementing Agent is the supporting organization answerable to the wargame OPR for wargame taskings. An Implementing Agent, when separate from the wargame OPR, does not establish policy or direct operations unless specifically tasked by the supported wargame OPR responsible for policy and oversight of the activity being executed. When separate from the wargame OPR, the Implementing Agent is responsible for implementing specific tasks in accordance with the plans and programs established or directed by the wargame OPR.

Major Wargame—An Air Force, Joint or other Service wargame designed to impact future Air Force force structure and employment concepts.

Title 10 Wargame—A Service sponsored wargame, generally supported by participants from Joint Staffs, the Services and other organizations, which is used to explore futuristic issues impacting doctrine, force structure and/or employment concepts.

Wargame—A simulation, by whatever means, of a military operation involving two or more opposing forces, using rules, data and procedures designed to depict an actual or assumed live situation (JP 1-02). Wargames generally are not carried out for the purpose of providing training. Wargames often explore emerging operational concepts or alternative force structures in a futuristic scenario.

Wargame Host—An Air Force, other government agency, or contractor tasked to provide facilities, administrative support, and other Services to the wargame OPR as tasked in the Implementing Directive or in a wargame MOA.

Attachment 2

AFRC AND ANG SUPPORT TO WARGAMES

A2.1. The Air Force Reserve Command (AFRC) and Air National Guard (ANG) can provide invaluable assistance in improving Air Force participation in Title 10 and other major wargames. The goal of the AFRC and ANG program for supporting wargames is to expand existing Air Reserve Component (ARC) augmentation capabilities and increase the cadre of trained personnel with expertise in wargames.

A2.2. The ARC Wargame Support Program consists of the following major areas:

A2.2.1. AFRC and ANG units possess personnel capable of supporting the conduct of wargames and can significantly assist wargame OPRs in wargame planning, execution, and post-wargame assessment. These personnel have unique expertise in areas such as Request For Information (RFI) Cells, AARs, wargame participant role-playing, and opposition force operations.

A2.2.2. ARC volunteers are available to augment opposing force players and control staffs when positions cannot be filled from active duty resources. Many of these personnel have previous wargame experience.

A2.2.3. HQ USAF/XOXS maintains a database of specific wargame and exercise billets filled by ARC personnel. These volunteer personnel can provide invaluable experience and continuity. Should specific experience be required for a wargame, requests may be submitted to HQ USAF/XOXS (ARCLO). The soliciting agent or organization is then responsible for coordinating with the individual volunteer and their respective ARC command channels for scheduling and funding.

A2.3. Responsibilities:

A2.3.1. The HQ USAF/XOXS (ARCLO) facilitates recruitment of AFRC and ANG volunteers, coordinates proficiency training, and secures/manages funding to support the program. Additionally, the ARCLO coordinates and integrates wargame augmentation and training requirements, and matches positions against requirements that can be filled by AFRC and ANG personnel. For ANG and AFRC personnel, wargame augmentation will be an additional duty since augmentees will be subject to real-world exercises and contingency tasking and, in the case of the ANG, state tasking.

A2.3.2. Requests for AFRC and ANG support should be forwarded to HQ USAF/XOXS (ARCLO) for potential fill from AFRC and ANG units, or AFRC IMA resources. Requests should arrive at AF/XOXS as soon as possible in the planning process but not later than 45 days prior to the wargame.

Attachment 3

TRAINING PROGRAMS FOR WARGAME PARTICIPANTS

A3.1. Pre-wargame education and training for participants in Title 10 and other major wargames is essential for successful conduct of the wargame. Three types of training are suggested:

A3.1.1. Formal Training (for wargaming staff officers and players).

A3.1.2. Preparation Training (for a specific wargame).

A3.1.3. Senior Officer Training (O-7 and above).

A3.2. Formal Training is accomplished through formal courses conducted by the College of Aerospace Doctrine, Research and Education (CADRE). These courses focus on the art of campaign planning, limitations of modeling and simulation and associated impact on the representation of air and space power, the importance of setting wargame objectives that will allow air and space power to play an appropriate role during wargame operations, etc. The goal of this training is to develop a pool of trained wargamers throughout the Air Force, including wargamers in the Air Reserve Component. Wargame action agencies/OPRs should contact CADRE for a listing of formal training courses, schedules, and to arrange for quotas/attendance. Formal training, for personnel participating in wargames, should be scheduled to the maximum extent feasible.

A3.3. Preparation Training for specific wargames is the responsibility of the HQ USAF wargame OPR. Preparation training should be designed to familiarize players with the wargame's goals and objectives, the scenario and construct, and the Air Force structure/capabilities the wargame action agency is attempting to portray. It should also include Air Force operational concepts and doctrine being played or assessed, force capabilities and operational concepts of the other Services, and any other information the wargame action agency deems relevant. During this training, wargame players may be assigned responsibilities for capturing potential insights based on the wargame's results, and accomplishing other tasks, as required. The wargame OPR is responsible for scheduling and conducting this training approximately 30 days, but not later than, one week, prior to the wargame.

A3.4. Senior Officer Training is the responsibility of the wargame OPR. The goal is to prepare senior officers for participation in a specific wargame. Training will cover the same areas defined in paragraph [A3.3.](#), above. Insights from other senior officers who previously participated in the wargame are very relevant for this level of training, which is normally conducted not later than one week prior to the wargame.